

IN THE CLAIMS

Please amend claims 1, 12, 25, 38, 51, 64, and 77 as follows:

1. (WITHDRAWN) A self-expanding data package comprising:  
basic table data having one or more table rows;  
a set of one or more constant lists having one or more values; and  
one or more row validation calculations;  
wherein use of the set of constant lists and row validation calculations provides a mechanism for compact data storage, wherein the self-expanding data package ~~may be expanded~~ is capable of expansion into an expanded table having expanded table rows wherein each expanded table row comprises a combination such that:  
for each constant list of values, every list member is combined with all other basic table rows and additional list members to produce every possible combination ~~into an expanded table having expanded table rows~~; and  
the row validation calculations are applied to test validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.
2. (WITHDRAWN) The self-expanding data package of claim 1 further comprising a calculation utilized to perform a precursor conditional test that is used in one or more row validation calculations.
3. (WITHDRAWN) The self-expanding data package of claim 1 further comprising a calculation utilized to provide additional data used in the expanded table
4. (WITHDRAWN) The self-expanding data package of claim 1 wherein the self-expanding data package comprises product data for use in a computer-aided design application.
5. (WITHDRAWN) The self-expanding data package of claim 1 wherein the one or more of the row validation calculations provide for eliminating duplicate expanded table rows.

6. (WITHDRAWN) The self-expanding data package of claim 1 wherein the basic table data, set of one or more constant lists, and one or more row validation calculations are specified using extensible markup language (XML).
7. (WITHDRAWN) The self-expanding data package of claim 1 wherein the row validation calculations are selected through a graphical user interface.
8. (WITHDRAWN) The self-expanding data package of claim 1 wherein the self-expanding data package is transmitted across a network.
9. (WITHDRAWN) The self-expanding data package of claim 1 wherein one or more row validation calculations comprise one or more filters that limit results displayed from the expanded table rows.
10. (WITHDRAWN) The self-expanding data package of claim 1 wherein an editor provides an ability to directly edit the self-expanding data package.
11. (WITHDRAWN) The self-expanding data package of claim 1 wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.
12. (CURRENTLY AMENDED) A method for generating data in a self-expanding data package in a computer system comprising:
  - generating one or more values in a set of one or more constant lists and storing said one or more values in the self-expanding data package;
  - generating one or more calculations that operate on one or more values in the set of one or more constant lists and storing said one or more calculations in the self-expanding data package;
  - transmitting the self-expanding data package to a second computer system that expands the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row comprises a combination and each combination is generated by combining

every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

13. (PREVIOUSLY PRESENTED) The method of claim 12 further comprising, generating one or more basic table data having one or more table rows, and storing said one or more basic table data in the self-expanding data package, wherein the self-expanding data package is further expanded by combining every value in each constant list with each basic table row.

14. (PREVIOUSLY PRESENTED) The method of claim 12, wherein one or more calculations are applied to test validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.

15. (PREVIOUSLY PRESENTED) The method of claim 14, wherein one or more calculations are utilized to perform a precursor conditional test that is used to test validity of the expanded table rows.

16. (PREVIOUSLY PRESENTED) The method of claim 12, wherein one or more calculations are utilized to provide additional data used in the expanded table.

17. (ORIGINAL) The method of claim 12, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

18. (ORIGINAL) The method of claim 12, wherein one or more calculations provide for eliminating duplicate expanded table rows.

19. (ORIGINAL) The method of claim 12, wherein the self-expanding data package is written in extensible markup language (XML).

20. (ORIGINAL) The method of claim 12, wherein one or more calculations are selected through a graphical user interface.

21. (ORIGINAL) The method of claim 12, wherein the self-expanding data package is transmitted across a network.

22. (ORIGINAL) The method of claim 12, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

23. (PREVIOUSLY PRESENTED) The method of claim 12, wherein an editor is used to directly edit the self-expanding data package.

24. (ORIGINAL) The method of claim 12, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

25. (WITHDRAWN) A method for utilizing data in a self-expanding data package in a computer system comprising:

receiving a self-expanding data package comprising one or more values in a set of one or more constant lists and one or more calculations that operate on one or more values in the set of one or more constant lists;

expanding the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row comprises a combination and each combination is generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

26. (WITHDRAWN) The method of claim 25, wherein:  
the self-expanding data package further comprises one or more basic table data having one or more table rows; and

the expanding further comprises combining every value in each constant list with each basic table row.

27. (WITHDRAWN) The method of claim 25, wherein:

one or more calculations test validity of the expanded table rows; and

only those expanded table rows that are valid are maintained in the expanded table.

28. (WITHDRAWN) The method of claim 27, wherein one or more calculations perform a precursor conditional test that is used to test validity of the expanded table rows.

29. (WITHDRAWN) The method of claim 25, wherein one or more calculations provide additional data used in the expanded table

30. (WITHDRAWN) The method of claim 25, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

31. (WITHDRAWN) The method of claim 25, wherein one or more calculations eliminate duplicate rows or otherwise apply business rules to eliminate unwanted rows in the resulting expanded table.

32. (WITHDRAWN) The method of claim 25, wherein the self-expanding data package is written in extensible markup language (XML).

33. (WITHDRAWN) The method of claim 25, wherein one or more calculations are selected through a graphical user interface.

34. (WITHDRAWN) The method of claim 25, wherein the self-expanding data package is received from across a network.

35. (WITHDRAWN) The method of claim 25, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

36. (WITHDRAWN) The method of claim 25, wherein an editor provides an ability to directly edit the self-expanding data package.

37. (WITHDRAWN) The method of claim 25, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

38. (CURRENTLY AMENDED) An apparatus for generating data in a self-expanding data package in a computer system comprising:

(a) a computer system having a memory and a data storage device coupled thereto;  
(b) one or more computer programs, performed by the computer system, for generating a self-expanding data package and storing the self-expanding data package in the memory, wherein the self-expanding data package comprising:

- (i) one or more values in a set of one or more constant lists; and
- (ii) one or more calculations that operate on one or more values in the set of one or more constant lists;

wherein the self-expanding data package is transmitted to a second computer system that expands the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row comprises a combination and each combination is generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

39. (PREVIOUSLY PRESENTED) The apparatus of claim 38, wherein:  
the self-expanding data package further comprises one or more basic table data having one or more table rows; and

the self-expanding data package is further expanded by combining every value in each constant list with each basic table row.

40. (PREVIOUSLY PRESENTED) The apparatus of claim 38, wherein one or more calculations are applied to test validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.

41. (PREVIOUSLY PRESENTED) The apparatus of claim 40, wherein one or more calculations are utilized to perform a precursor conditional test that can be used to test validity of the expanded table rows.

42. (PREVIOUSLY PRESENTED) The apparatus of claim 38, wherein one or more calculations are utilized to provide additional data used in the expanded table

43. (ORIGINAL) The apparatus of claim 38, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

44. (ORIGINAL) The apparatus of claim 38, wherein one or more calculations provide for eliminating duplicate expanded table rows.

45. (ORIGINAL) The apparatus of claim 38, wherein the self-expanding data package is written in extensible markup language (XML).

46. (ORIGINAL) The apparatus of claim 38, further comprising a graphical user interface displayed by the computer system for selecting the one or more calculations.

47. (ORIGINAL) The apparatus of claim 38, wherein the one or more computer programs are further configured to transmit the self-expanding data package across a network.

48. (ORIGINAL) The apparatus of claim 38, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

49. (PREVIOUSLY PRESENTED) The apparatus of claim 38, wherein one or more of the computer programs comprise an editor that is used to directly edit the self-expanding data package.

50. (ORIGINAL) The apparatus of claim 38, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

51. (WITHDRAWN) An apparatus for utilizing data in a self-expanding data package in a computer system comprising:

- (a) a computer system having a memory and a data storage device coupled thereto;
- (b) one or more computer programs, performed by the computer system, for receiving a self-expanding data package stored in the memory, the self-expanding data package comprising:
  - (i) one or more values in a set of one or more constant lists; and
  - (ii) one or more calculations that operate on one or more values in the set of one or more constant lists; and
- (c) one or more computer programs, performed by the computer system, for expanding the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row comprises a combination and each combination is generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

52. (WITHDRAWN) The apparatus of claim 51, wherein:  
the self-expanding data package further comprises basic table data having one or more table rows; and

the computer program is further configured to expand the self-expanding data package by combining every value in each constant list with each basic table row.



53. (WITHDRAWN) The apparatus of claim 51, wherein one or more calculations are applied to test validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.

54. (WITHDRAWN) The apparatus of claim 53, wherein one or more calculations are utilized to perform a precursor conditional test that is used to test validity of the expanded table rows.

55. (WITHDRAWN) The apparatus of claim 51, wherein one or more calculations are utilized to provide additional data used in the expanded table

56. (WITHDRAWN) The apparatus of claim 51, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

57. (WITHDRAWN) The apparatus of claim 51, wherein one or more calculations provide for eliminating duplicate expanded table rows.

58. (WITHDRAWN) The apparatus of claim 51, wherein the self-expanding data package is written in extensible markup language (XML).

59. (WITHDRAWN) The apparatus of claim 51, further comprising a graphical user interface displayed by the computer system for selecting the one or more calculations.

60. (WITHDRAWN) The apparatus of claim 51, wherein the self-expanding data package is received from across a network.

61. (WITHDRAWN) The apparatus of claim 51, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

62. (WITHDRAWN) The apparatus of claim 51, further comprising an editor performed by the computer system that provides an ability to directly edit the self-expanding data package.

63. (WITHDRAWN) The apparatus of claim 51, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

64. (CURRENTLY AMENDED) An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to perform a method for generating data in a self-expanding data package in a computer system, the method comprising:

generating, in the self-expanding data package, one or more values in a set of one or more constant lists;

generating, in the self-expanding data package, one or more calculations that can operate on one or more values in the set of one or more constant lists;

wherein the self-expanding data package is transmitted to a second computer system that expands the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row comprises a combination and each combination is generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

65. (PREVIOUSLY PRESENTED) The article of manufacture of claim 64, the method further comprising, generating, in the self-expanding data package, basic table data having one or more table rows, wherein the self-expanding data package is further expanded by combining every value in each constant list with each basic table row.

66. (PREVIOUSLY PRESENTED) The article of manufacture of claim 64, wherein one or more calculations are applied to test a validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.

67. (PREVIOUSLY PRESENTED) The article of manufacture of claim 66, wherein one or more calculations are utilized to perform a precursor conditional test that is used to test validity of the expanded table rows.

68. (PREVIOUSLY PRESENTED) The article of manufacture of claim 64, wherein one or more calculations are utilized to provide additional data used in the expanded table

69. (ORIGINAL) The article of manufacture of claim 64, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

70. (PREVIOUSLY PRESENTED) The article of manufacture of claim 64, wherein one or more calculations eliminate duplicate expanded table rows.

71. (ORIGINAL) The article of manufacture of claim 64, wherein the self-expanding data package is written in extensible markup language (XML).

72. (ORIGINAL) The article of manufacture of claim 64, wherein one or more calculations are selected through a graphical user interface.

73. (ORIGINAL) The article of manufacture of claim 64, wherein the method further comprises transmitting the self-expanding data package across a network.

74. (ORIGINAL) The article of manufacture of claim 64, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

75. (PREVIOUSLY PRESENTED) The article of manufacture of claim 64, wherein an editor is used to directly edit the self-expanding data package.

76. (ORIGINAL) The article of manufacture of claim 64, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

77. (WITHDRAWN) An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to perform a method for utilizing data in a self-expanding data package in a computer system, the method comprising:

- (a) receiving a self-expanding data package comprising:
  - (i) one or more values in a set of one or more constant lists; and
  - (ii) one or more calculations that operate on one or more values in the set of one or more constant lists; and

(b) expanding the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row comprises a combination and each combination is generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

78. (WITHDRAWN) The article of manufacture of claim 77, wherein:  
the self-expanding data package further comprises basic table data having one or more table rows; and

the self-expanding data package is further expanded by combining every value in each constant list with each basic table row.

79. (WITHDRAWN) The article of manufacture of claim 77, wherein one or more calculations are applied to test validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.

80. (WITHDRAWN) The article of manufacture of claim 79, wherein one or more calculations are utilized to perform a precursor conditional test that is used to test validity of the expanded table rows.

81. (WITHDRAWN) The article of manufacture of claim 77, wherein one or more calculations are utilized to provide additional data used in the expanded table

82. (WITHDRAWN) The article of manufacture of claim 77, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

83. (WITHDRAWN) The article of manufacture of claim 77, wherein one or more calculations provide for eliminating duplicate expanded table rows.

84. (WITHDRAWN) The article of manufacture of claim 77, wherein the self-expanding data package is written in extensible markup language (XML).

85. (WITHDRAWN) The article of manufacture of claim 77, wherein one or more calculations are selected through a graphical user interface.

86. (WITHDRAWN) The article of manufacture of claim 77, wherein the self-expanding data package is received from across a network.

87. (WITHDRAWN) The article of manufacture of claim 77, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

88. (WITHDRAWN) The article of manufacture of claim 77, wherein an editor provides an ability to directly edit the self-expanding data package.

89. (WITHDRAWN) The article of manufacture of claim 77, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.